

Title (en)

A REACTION PUMP FOR HYDROCARBON CONVERSION

Title (de)

REAKTIONSPUMPE FÜR DIE UMWANDLUNG VON KOHLENWASSERSTOFFEN

Title (fr)

POMPE À RÉACTION POUR LA CONVERSION D'HYDROCARBURES

Publication

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Application

**EP 13831971 A 20131207**

Priority

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Abstract (en)

[origin: WO2014087238A2] Reaction pumps and systems for hydrocarbon conversion are disclosed. A reaction pump for conversion of hydrocarbons has a housing, a reaction chamber enclosed by the housing, for containment of a hydrocarbon process fluid or liquid reactant, a mixing element disposed inside the reaction chamber, the mixing element coupled to a rotatable shaft, and a plurality of bearings receiving the shaft, each bearing being disposed outside the reaction chamber. At least one of the bearings is closest to the reaction chamber. A type of barrier is disposed between the reaction chamber and the closest bearing, for fluidically separating the reactant from the closest bearing. This barrier can take the form of a seal protection chamber. A system for hydrocarbon conversion includes the reaction pump and an additional circuit for cleaning and recycling process fluid or liquid.

IPC 8 full level

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